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REMARKS

Claims 1-32 were in the application as filed. Pursuant to a Restriction Requirement, claims 12, 13, 16, 28, 29 and 32 have been withdrawn without prejudice from consideration in this application.

Claims 1-11, 14, 15, 17-27, 30, and 31 stand rejected. Claims 9 has been amended in response to a rejection under 35 U.S.C. §112, ¶2. Claims 1-8, 10, 11, 14, 15, 17-27, 30, and 31 remained unamended.

The amendments made herein add no new matter. Reconsideration and reexamination of the application is respectfully requested in view of the amendments and the following remarks.

Rejections under 35 U.S.C. §112, ¶2

Claim 9 stands rejected under 35 U.S.C. §112, ¶2, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

Claim 9 has been amended to read "wherein the at least one fastener is insertable into at least one base ring aperture." Applicants believe that this eliminates the Examiner's ground for rejection (i.e. that the base ring is recited as a positive limitation in claim 9) in that the at least one fastener is insertable, rather than inserted, into at least one base ring aperture, rather than the base ring aperture. Thus, claim 9 should be examined as if the gas cylinder has not been positively claimed.

Applicants submit that claim 9 is now in condition for allowance. Thus, Applicants request the withdrawal of the rejection of claim 9, and notification of the allowance of claim 9.

Rejections under 35 U.S.C. §102(b)

Claims 1-5, 7-10, 17-21, and 23-26 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 6,508,477 to Burkett. The rejection is respectfully traversed.

The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986).

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Burkett '477 discloses in Figures 6-9 a gas cylinder 14' having at its lower end a fitting 22' comprising a solid boss 24'. A threaded opening 80' is formed coaxially in but not through the boss 24'. Except for the threaded opening 80', the fitting 22' is a generally solid cylindrical body having a circumferentially displaced flange portion. As illustrated in Figure 9 of Burkett '477, the fitting 22' extends interiorly through the bottom polar end 18' of the cylinder 14' so that only the circumferentially displaced flange portion extends below the gas cylinder body.

Claim 1 requires that the gas cylinder base be able to support a gas cylinder having a base ring comprising at least one base ring aperture therethrough. The gas cylinder of Burkett '477 has no base ring. The Examiner claims that the fitting 22' and boss 24' comprise a ring. However, the fitting 22' and boss 24' disclosed in Burkett '477 can in no way be construed as a ring.

A ring is defined as "an object having the form of a circle." *The Oxford English Dictionary*, 2d Ed. (Clarendon Press, 1991). A circle is defined as "a plane curve everywhere equidistant from a given fixed point, the center." *The American Heritage Dictionary of the English Language*, 4th Ed. (Houghton Mifflin Company, 2000). The Application describes the base ring of the gas cylinder consistent with this definition: "The base ring 14 is a generally ring-like annular structure formed of a thin strip of metal, such as steel, and fixedly attached to the cylinder body 13, such as by welding." *Application as Filed, Paragraph [0016]*. In contrast, Burkett '477 discloses a solid cylindrical boss 24' having a threaded opening extending into the boss 24', and having a diameter much smaller than the diameter of the boss 24'. This structure is not a ring.

Because the fitting 22' and boss 24' do not comprise a ring, Burkett '477 does not disclose a gas cylinder having a base ring, and thus does not disclose a gas cylinder base which can support a gas cylinder having a base ring, as required in claim 1.

Claim 1 also requires a fastener that can engage the base ring of the gas cylinder. Because Burkett '477 does not disclose a gas cylinder having a base ring, it does not disclose a fastener that can engage a base ring.

Claim 1 further requires a base skirt and a support element extending upwardly from the base skirt. Burkett '477 does not disclose this structure. The Examiner identifies element 42' of Burkett '477 as a base skirt, and a recess having a downwardly-depending peripheral vertical

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wall 56' as a support element. However, the Examiner ignores the requirement in claim 1 that the support element extend upwardly from the base skirt. The Examiner simply asserts that this is disclosed in Burkett '477, but without any factual support, and notwithstanding the fact that Burkett '477 clearly illustrates the Examiner's "support element" as a recess extending downwardly from the Examiner's "base skirt." Thus, Burkett '477 does not disclose a support element extending upwardly from the base skirt.

The structure described in claim 1 is clearly and fundamentally different than the structure disclosed in Burkett '477. Burkett '477 does not disclose a gas cylinder having a base ring, a fastener that can engage the base ring of a gas cylinder, or a support element extending upwardly from a base skirt as required in claim 1. Thus, claim 1 is not anticipated by Burkett '477 because each and every element of claim 1 is not found in Burkett '477.

Applicants submit that claim 1 is in condition for allowance. Thus, Applicants request the withdrawal of the rejection of claim 1, and notification of the allowance of claim 1.

Claims 2-5 and 7-10 depend, directly or indirectly, from claim 1. For the reasons discussed above with respect to the errors in the rejection of claim 1, claims 2-5 and 7-10 are not anticipated by Burkett '477. Nevertheless, Burkett '477 does not disclose other required elements of claims 2-5 and 7-10.

Claim 2 requires that the first lateral dimension [of the base skirt] be greater than the diameter of the gas cylinder. Nowhere in Burkett '477 is this disclosed. There is no written description of the dimensional relationship between the gas cylinder 14 and the frame 12. The figures similarly do not unequivocally disclose such a dimensional relationship. At best, the figures are ambiguous in this respect.

Claim 3 requires that the support element comprise at least one aperture "therethrough." As discussed above, the Examiner's "support element" comprises a boss 24' with a threaded aperture 80'. However, as clearly illustrated in Figure 9, the aperture 80' does not extend through the boss 24'. The aperture 80' only extends partway into the boss 24'.

Claims 4 and 5 depend from claim 3 and, thus, cannot be anticipated by Burkett '477.

Claim 7 depends from claim 5 and, thus, cannot be anticipated by Burkett '477. Claim 8 also depends from claim 5 and, additionally, requires a fastener with a point for engaging the base ring. Such a fastener is not disclosed in Burkett '477. Indeed, because the fastener in

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Burkett '477 is threaded into the gas cylinder, there is no need for a point to engage the gas cylinder. Again, the Examiner simply asserts without any support that the fastener has a point.

Claim 9 depends from claim 7 and, thus, cannot be anticipated by Burkett '477. Claim 10 requires that the support element comprise a continuous support ring. As argued above, the Examiner's "support element" is a recess, and, as discussed above, cannot be a ring. Thus, claim 10 is not anticipated by Burkett '477.

Claim 17 is essentially identical to claim 1 with the addition of the positive recitation of a gas cylinder having a base ring. The Examiner has presented no additional arguments in support of the rejection of claim 17. Thus, because claim 17 requires a gas cylinder having a base ring, a fastener that can engage the base ring of the gas cylinder, and a support element extending upwardly from the base skirt, none of which is disclosed in Burkett '477 as discussed above, claim 17 is not anticipated by Burkett '477.

Claims 18-21 and 23-26 are essentially identical to claims 2-5 and 7-10, respectively. For the reasons discussed above with respect to claims 2-5 and 7-10, claims 18-21 and 23-26 are not anticipated by Burkett '477.

Applicants submit that claims 2-5, 7-10, 17-21, and 23-26 are in condition for allowance. Thus, Applicants request the withdrawal of the rejection of claims 2-5, 7-10, 17-21, and 23-26, and notification of the allowance of claims 2-5, 7-10, 17-21, and 23-26.

Rejections under 35 U.S.C. §103(a)

Claims 11, 14, 15, 27, 30, and 31 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Burkett '477 "as applied to claims 1, 10, 17, and 26 above, referencing the embodiment taught in Figs. 1-5." The rejection is respectfully traversed.

Figures 1-5 of Burkett '477 disclose a gas cylinder 14 having a lower polar end 18 and a lower base portion 26 attached to the lower polar end 18 through a cylindrical boss 24 extending from the lower polar end 18. The base portion 26 is a somewhat conical-shaped body having a recess for receipt of the cylindrical boss 24 which defines an annular wall at an upper portion of the base portion 26. Figure 5 of Burkett '477 illustrates the annular wall as having a somewhat rounded shoulder along the outer edge thereof.

The Examiner bears the burden of establishing a prima facie case of obviousness based

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upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the relevant art would lead that individual to combine the relevant teachings of the references. The Examiner cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988). When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. *In re Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617.

§706.02(j) of the Manual of Patent Examining Procedure states:

After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the office action: (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, (B) the difference or differences in the claim over the applied reference(s), (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)....The initial burden is on the examiner to provide some suggestion of the desirability of doing what the

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inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985).... It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply.

Claims 11 and 27

The Examiner's §103(a) rejection fails to meet the prima facie standard for a §103(a) rejection and is therefore improper. Claims 11 and 27 depend from claims 1 and 17, respectively, and thus require a support element adapted to slidably receive the base ring of a gas cylinder, a fastener for engaging the base ring of the gas cylinder, and that the support ring terminate in a radially-inwardly sloping chamfered end. Figures 1-5 of Burkett '477 clearly show a gas cylinder without a base ring. As discussed above, the base ring described in the Application is a generally ring-like annular structure formed of a thin strip of metal and fixedly attached to the cylinder body 13. There is no such structure forming any part of the gas cylinder disclosed in Burkett '477. Furthermore, nowhere in Figures 1-5 is a fastener shown for engaging a base ring of a gas cylinder.

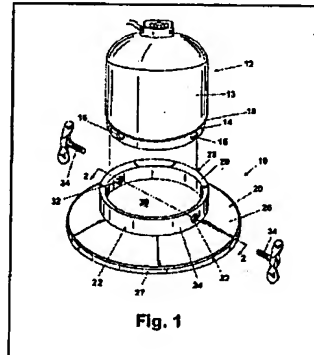


Fig. 1

As discussed in the Application, and as illustrated in Figures 1 and 2 from the Application, an embodiment of the invention comprises a chamfered end 28 of a support element 22 having a face 29 which slopes radially inwardly. The face 29 engages and supports the rounded bottom shoulder 18 of the portable gas cylinder 12, and

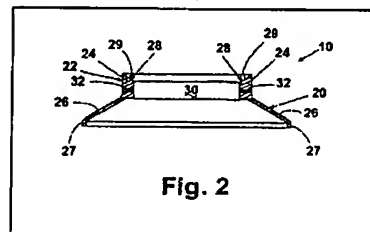


Fig. 2

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aids in the coaxial seating of the gas cylinder 12 and the cylinder base ring 14 in the gas cylinder base 10.

The Examiner asserts that the upper part of element 26 of Burkett '477 terminates in a radially inwardly sloping chamfered end. However, this is patently incorrect. The Examiner defines chamfered as "beveled or inclined or slanted," referencing Webster's Dictionary in support, which describes the chamfered end 28 of Applicants' gas cylinder base 10. However, this structure is not disclosed in Burkett '477. The rounded shoulder of the upper part of element 26 is not an inwardly sloping chamfered end; it is outwardly sloping. Moreover, the rounded shoulder is not chamfered, i.e. not beveled, inclined, or slanted, because it is rounded.

As discussed above, claim 17 recites the positive limitation of a gas cylinder having a base ring. Burkett '477 does not disclose this in either of the two embodiments. Thus, because claim 27 requires a gas cylinder having a base ring, no combination of the two embodiments can reach the invention described in claim 27.

The Examiner also asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the gas base with a chamfered edge, based upon a combination of the two embodiments illustrated in Burkett '477. However, the Examiner offers no support for this conclusion, and has not identified any teaching, suggestion, or motivation in Burkett '477 for combining the two embodiments. Applicant's chamfered edge is used to engage and support the rounded bottom shoulder of the portable gas cylinder, and aid in the coaxial seating of the gas cylinder and the cylinder base ring in the gas cylinder base. In contrast, the insertion of a boss into a recess which is illustrated in both embodiments of Burkett '477 would eliminate any need for a chamfered edge as recited in claims 11 and 27. Furthermore, Burkett 477 discloses two embodiments that are clearly described in the patent as separate and distinct. Each presumably is capable of performing the supporting function equally satisfactorily. Thus, there would be no incentive to combine the two embodiments in the manner asserted by the Examiner. There is simply nothing with respect to either embodiment in Burkett '477 to suggest the use of a radially-inwardly sloping chamfered end, and the Examiner has pointed to no such suggestion. The Examiner is simply engaging in impermissible hindsight reconstruction of Applicants' invention using the disclosure of Burkett '477 as a blueprint.

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Assuming, for the sake of argument, that the asserted combination is tenable, it would disclose nothing more than a gas cylinder base having an outwardly-directed rounded shoulder. This is not the invention of claims 11 and 27.

Claims 14 and 30

Claims 14 and 30 require that the base skirt 20 be circular. The Examiner asserts that it would have been obvious from the teachings of the embodiment illustrated in Figures 1-5 to make the gas base circular. Claims 14 and 30 depend from claims 1 and 17, respectively. Thus, claims 14 and 30 inherently incorporate all limitations of claims 1 and 17. As discussed above, claims 1 and 17 require a support element adapted to slidably receive the base ring of a gas cylinder and a fastener for engaging the base ring of the gas cylinder, neither of which is disclosed in Burkett '477. Because the asserted combination of both embodiments does not reach the invention of claims 1 and 17, the asserted combination does not reach the invention of claims 14 and 30.

Claims 15 and 31

Claims 15 and 31 require the support element be coaxial with the base skirt. This is illustrated in Figures 1 and 2 in which the support element 22 is coaxial with the base skirt 20. The Examiner asserts that it would have been obvious from the teachings of the embodiment illustrated in Figures 1-5 to make the gas base coaxial. Claims 15 and 31 depend from claims 1 and 17, respectively. Thus, claims 15 and 31 inherently incorporate all limitations of claims 1 and 17. As discussed above, claims 1 and 17 require a support element adapted to slidably receive the base ring of a gas cylinder and a fastener for engaging the base ring of the gas cylinder, neither of which is disclosed in Burkett '477. Thus, the asserted combination does not reach the invention of claims 15 and 31.

Claims 6 and 22

Claims 6 and 22 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Burkett '477 "as applied to claims 1, 3-5, 17, 19-21 above" in view of U.S. Patent No. 6,709,222 to Inman, Jr. The rejection is respectfully traversed.

The Examiner asserts that Inman, Jr. illustrates the use of thumb screws to support a gas cylinder which, in combination with Burkett '477, renders Applicants' gas cylinder base obvious. However, Inman '222 illustrates a hand cart having support elements, such as arms and forks, for

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supporting various items on the hand cart. The support elements can be configured in selected positions and retained in place by a system of pins. The pins, identified by the Examiner and in Inman '222 by the numeral 54, are identified in Inman '222 as spring clip type pins, wire lock pins, detent ring pins, and "any other similar method of securing the arms and forks in position." *Col. 3, ln. 15-20*. Nowhere in Inman '222 is there any reference to thumb screws. The elements identified in Figures 1-5 of Inman '222 with the numeral 54 may have an appearance similar to a thumb screw. However, Inman '222 makes it clear that these elements are pins, not thumb screws.

Furthermore, the pins 54 are not used to secure any item being transported, including a gas cylinder, by the hand cart. Rather, the pins 54 are used to secure the supporting arms and forks in position on the hand cart. Thus, no combination of Burkett '477 and Inman '222 discloses the invention of claims 6 and 22.

Claims 11, 14, 15, 27, 30, and 31 are not rendered obvious by the Examiner's asserted combinations. The Examiner has done nothing more than engage in impermissible hindsight reconstruction of Applicants' invention using Applicants' disclosure as a blueprint. Thus, claims 11, 14, 15, 27, 30, and 31 are in condition for allowance. Applicants request the withdrawal of the rejection of claims 11, 14, 15, 27, 30, and 31, and notification of the allowance of claims 11, 14, 15, 27, 30, and 31.

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CONCLUSION


For the reasons discussed above, claims 1-11, 14, 15, 17-27, 30, and 31 are in condition for immediate allowance. It is respectfully submitted that all of the pending claims in the application are allowable over the prior art of record. Early notification of allowability is respectfully requested.

If there are any remaining issues which the Examiner believes may be resolved in an interview, the Examiner is respectfully invited to contact the undersigned.

Respectfully submitted,

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Dated: 10/22/04



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